

## ASSIGNMENT 6 | Let's PHP!

This assignment relates to the following Course Learning Requirements:

**CLR 1:** Write program code using structured programming, and top-down coding techniques

**CLR 3:** Prepare program documentation using prescribed program specifications

**CLR 4:** Debug program problems using manual methods and computerized tools in an appropriate manner

**CLR 5:** Modify an existing program according to program specifications

### Objective of this Assignment:

The objective of this assignment is to put in practice the theory acquired so far in PHP programming language.

Upon completing this assignment, you should be able to:

- Create PHP files
- Declare PHP variables and functions
- Understand PHP data types
- Determine PHP variable types
- Upload the .php files to your home directory
- Accept and process data from the browser using the GET (form) and POST (form) methods

### Pre-Assignment Instructions:

1. To prepare you for this assignment, read the module 8 and 9 content and embedded examples.

### Assignment Tasks:

#### PART 1

1. Create a new PHP file called "welcome.php"
2. Copy the template content from Annex 1 of this document to welcome.php
3. Give this page a title (e.g. Welcome)
4. Review the example on using the PHP super global variable `$_GET` at the following link: [LINK](#)
5. Write a PHP script which displays the following message on the page, depending on the values set by the user in the URL:
  - a. If the user enters the following URL: `.../welcome.php?firstName=ExampleFirstName`  
Then the message displayed on the page should be: Howdy ExampleFirstName
  - b. If the user enters the following URL: `.../welcome.php?lastName=ExampleLastName`  
Then the message displayed on the page should be: Howdy ExampleLastName
  - c. If the user enters the following URL: `.../welcome.php?firstName=&lastName=`  
Then the message displayed on the page should be: Howdy no names

6. Ensure that the script works with any name entered in the URL
7. Ensure that the script uses exactly the variables firstName and lastName (case sensitive).
8. Please verify your solution against the example shown in Annex 2 of this document

## PART 2

1. Create a new PHP file called "currency.php"
2. Copy the template content from Annex 3 of this document to currency.php
3. Give this page a title (e.g. Currency Converter)
4. Create an HTML form with the following features:
  - a. A textbox for the user to input the value to be converted
  - b. A set of radio buttons for the user to select the currency to be converted from
    - i. Currency types should be: CAN, USD, EUR, GBP, CHY
    - ii. The corresponding flag icon should be displayed beside each currency option
  - c. A set of radio buttons for the user to select the currency to be converted to
    - i. Currency types should be: CAN, USD, EUR, GBP, CHY
    - ii. The corresponding flag icon should be displayed beside each currency option
  - d. A submit button
5. Write a PHP script which takes the user input (amount, converting from currency, converting to currency) and applies an appropriate conversion. The conversion rate can be an example and does not need to be updated in real time based on the exchange rates.
  - a. A conversion to and from the same currency should result in the same amount before and after conversion
  - b. Error checking must be implemented to ensure that the user is notified if the input is not a number
6. The output should be formatted as follows:  
<flagIcon> <currencyAbbreviation> <originalAmount> = <flagIcon> <currencyAbbreviation> <convertedAmount>
7. Please verify your solution against the example shown in Annex 4 of this document

## PART 3

1. Create a .zip file containing the following files: welcome.php, currency.php, style.css, along with any other necessary files (e.g. images)
2. Submit the .zip file through Brightspace

### Important notes:

- Please make sure to follow carefully the instructions above. This should be treated as requirements set out by a customer, so please ensure that they are all met as described. This is also reflected in the rubric.
- It is important to use only a regular text editor such as a Visual Studio Code (VS Code), Notepad, or Notepad++. An IDE, such as Eclipse or Dreamweaver, cannot be used to complete this. It is highly recommended to use VS Code.

## Assignment Grading Rubric (10%)

welcome.php	Level 3	Level 2	Level 1	Criterion Score
Script variables	1.25 points Script uses variables firstName and lastName to generate a custom message	0.5 points Script uses variables other than firstName and lastName to generate a custom message	0 points Script does not use any variables to generate a custom message	/ 1.25
Input validation	1.25 points If the input provided by the user in the URL is: "...?firstName=Nicholas" Then the message displayed is: "Howdy Nicholas"	0.5 points If the input provided by the user in the URL is: "...?firstName=Nicholas" Then a message other than the following message is displayed: "Howdy Nicholas"	0 points If the input provided by the user in the URL is: "...?firstName=Nicholas" Then no message is displayed.	/ 1.25
Input validation (cont'd)	1.25 points If the input provided by the user in the URL is: "...?lastName=Bijnens" Then the message displayed is: "Howdy Bijnens"	0.5 points If the input provided by the user in the URL is: "...?lastName=Bijnens" Then a message other than the following message is displayed: "Howdy Bijnens"	0 points If the input provided by the user in the URL is: "...?lastName=Bijnens" Then no message is displayed.	/ 1.25
Input validation (cont'd)	1.25 points If the input provided by the user in the URL is: "...?firstName=&lastName=" Then the message displayed is: "Howdy no names"	0.5 points If the input provided by the user in the URL is: "...?firstName=&lastName=" Then a message other than the following message is displayed: "Howdy no names"	0 points If the input provided by the user in the URL is: "...?firstName=&lastName=" Then no message is displayed.	/ 1.25

Currency.php	Level 2	Level 1	Criterion Score
User input	1.5 points Currency input is in the form of a textbox All user input is organized in an HTML form Currency options are: CAD, USD, EUR, GBP, CNY Each currency option is associated with a radio button Each currency option is accompanied by the flag of the corresponding country (0.3 pts each)	0 points Currency input is not in the form of a textbox All user input is not organized in an HTML form Currency options are not: CAD, USD, EUR, GBP, CNY Each currency option is not associated with a radio button Each currency option is not accompanied by the flag of the corresponding country (0.3 pts each)	/ 1.5
Input validation	0.3 points An error is returned if the user enters something other than a number in the conversion field	0 points An error is not returned if the user enters something other than a number in the conversion field	/ 0.3
Conversion	2.7 points Converting to/from the same currency results in the same amount before and after conversion Converting to/from two different currencies results in an appropriate conversion Conversion uses a PHP function which has three input parameters: amount, original currency, final currency. (0.9 each)	0 points Converting to/from the same currency does not result in the same amount before and after conversion Converting to/from two different currencies does not result in an appropriate conversion Conversion does not use a PHP function which has three input parameters: amount, original currency, final currency. (0.9 each)	/ 2.7
Output	0.5 points The script displays the original amount and final amount along with the three letter abbreviation of each currency and the corresponding flag. Example: <flag> CAD 2.00 = <flag> EUR 1.36	0 points The script does not display the original amount and final amount along with the three letter abbreviation of each currency and the corresponding flag.	/ 0.5

Total

/ 10

## ANNEX 1 HTML Template

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
<title>Title Here</title>
```

```
</head>
```

```
<body>
```

```
    <h1>If you want a custom greeting message, please do the following: </h1>
```

```
    <fieldset>
```

```
        <ol>
```

```
            <li>In your address bar, append a '?' symbol </li>
```

```
            <li>Then write 'firstName=' with your first name next to it</li>
```

```
            <li>Then write '&' followed by 'lastName' with your last name next to it</li>
```

```
            <li>Hit ENTER and see your customized message in the greeting below</li>
```

```
        </ol>
```

```
    </fieldset>
```

```
</body>
```

```
</html>
```

## ANNEX 2 Example implementation of greeting message

← → ↻ 🏠 ⓘ localhost/a6soln/welcome.php?firstName=Nicholas ☆

**If you want a custom greeting message, please do the following:**

1. In your address bar, append a '?' symbol
2. Then write 'firstName=' with your first name next to it
3. Then write '&' followed by 'lastName' with your last name next to it
4. Hit ENTER and see your customized message in the greeting below

**Greeting: Howdy Nicholas !!**

## **ANNEX 3** HTML Template

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
<title>Title Here</title>
```

```
</head>
```

```
<body>
```






```
</body>
```






```
</html>
```

#### ANNEX 4 Example implementation of currency converter



## Welcome to currency converter

Amount:

Convert From: ☒  CAD ☐  USD ☐  EUR ☐  GBP ☐  CNY

Convert To: ☐  CAD ☒  USD ☐  EUR ☐  GBP ☐  CNY

Convert

 CAD2 =  USD1.43